

Appendix D

Average PCB Calculations for Dredging Alternatives 2 and 3

Upstream Surficial Sediment (0 to 2 ft) PCB Concentrations
Kinnickinnic River
Milwaukee, Wisconsin

KK02US1	1.2 mg/kg
KK02US2	0.81 mg/kg
KKUS0301	1.1 mg/kg
KKUS0302	2.2 mg/kg
KKUS0304	0.89 mg/kg
KKUS0306	0.48 mg/kg
KKUS0308	0.17 mg/kg
KKUS0309	0.1 mg/kg
Average	0.87 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 1
Section 1 Surficial Sediment (0 to 2 ft) PCB Concentrations
Kinnickinnic River
Milwaukee, Wisconsin

KK0201	2 mg/kg
KK0202	2.75 mg/kg
KK0203	0.79 mg/kg
KK0203D	0.42 mg/kg
KK0204	1.4 mg/kg
Average	1.5 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 1
Section 2 Surficial Sediment (0 to 2 ft) PCB Concentrations
Kinnickinnic River
Milwaukee, Wisconsin

KK0205	1.3 mg/kg
KK0206	1 mg/kg
KK0207	ns
KK0207R	1.9 mg/kg
KK0208	ns
Average	1.4 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 1
Section 3 Surficial Sediment (0 to 2 ft) PCB Concentrations
Kinnickinnic River
Milwaukee, Wisconsin

KK0209	2.33 mg/kg
KK0210	0.35 mg/kg
KK0211	6.1 mg/kg
KK0212	4.55 mg/kg
KK0213	3.9 mg/kg
KK0214	ns
Average	3.4 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 2A
Section 1 PCB Concentrations at 557 ft msl
Kinnickinnic River
Milwaukee, Wisconsin

KK0201	ns
KK0202	ns
KK0203	ns
KK0203D	ns
KK0204	0.38 mg/kg
Average	0.4 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 2A
Section PCB Concentrations 557 to 553 ft msl
Kinnickinnic River
Milwaukee, Wisconsin

KK0205	ns
KK0206	ns
KK0207	ns
KK0207R	ns
KK0208	ns
Average	ns mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 2A
Section 3 PCB Concentrations at 553 ft msl
Kinnickinnic River
Milwaukee, Wisconsin

KK0209	1.1 mg/kg
KK0210	ns
KK0211	ns
KK0212	ns
KK0213	ns
KK0214	ns
Average	1.1 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 2B
Section 1 PCB Concentrations (mg/kg) at 563.5 feet msl
Kinnickinnic River
Milwaukee, Wisconsin

KK0201	0 mg/kg
KK0202	3.13 mg/kg
KK0203	6.28 mg/kg
KK0203D	2.9 mg/kg
KK0204	3.35 mg/kg
Average	3.1 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 2B
Section 2 PCB Concentrations (mg/kg) at 563.5 ft msl
Kinnickinnic River
Milwaukee, Wisconsin

KK0205	2.91 mg/kg
KK0206	3.06 mg/kg
KK0207	ns
KK0207R	ns
KK0208	5.67 mg/kg
Average	3.9 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 2B
Section 3 PCB Concentrations (mg/kg) at 563.5 ft msl
Kinnickinnic River
Milwaukee, Wisconsin

KK0209	35.5 mg/kg
KK0210	1.7 mg/kg
KK0211	15.3 mg/kg
KK0212	5.16 mg/kg
KK0213	5.16 mg/kg
KK0214	1.93 mg/kg
Average	10.8 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 2C
Section 1 PCB Concentrations (mg/kg) at 562 feet msl
Kinnickinnic River
Milwaukee, Wisconsin

KK0201	0.77 mg/kg
KK0202	2.73 mg/kg
KK0203	1.92 mg/kg
KK0203D	2.4 mg/kg
KK0204	4.36 mg/kg
Average	2.4 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 2C
Section 2 PCB Concentrations (mg/kg) at 562 ft msl
Kinnickinnic River
Milwaukee, Wisconsin

KK0205	2.1 mg/kg
KK0206	3.46 mg/kg
KK0207	7 mg/kg
KK0207R	1.4 mg/kg
KK0208	5.67 mg/kg
Average	3.9 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 2C
Section 3 PCB Concentrations (mg/kg) at 562 ft msl
Kinnickinnic River
Milwaukee, Wisconsin

KK0209	21.4 mg/kg
KK0210	4.54 mg/kg
KK0211	5.23 mg/kg
KK0212	3.53 mg/kg
KK0213	5.16 mg/kg
KK0214	1 mg/kg
Average	6.8 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 3A
Section 1 PCB Concentrations at 557 ft msl (main channel)
Kinnickinnic River
Milwaukee, Wisconsin

KK0201	ns
KK0202	ns
KK0203	ns
KK0203D	ns
KK0204	0.38 mg/kg
Average	0.4 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 3A
Section 2 PCB Concentrations 557 to 553 ft msl (main channel)
Kinnickinnic River
Milwaukee, Wisconsin

KK0205	ns
KK0206	ns
KK0207	ns
KK0207R	ns
KK0208	ns
Average	ns mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 3A
Section 3 PCB Concentrations at 553 ft msl (main channel)
Kinnickinnic River
Milwaukee, Wisconsin

KK0209	1.1
KK0210	ns
KK0211	ns
KK0212	ns
KK0213	ns
KK0214	ns
Average	1.1 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 3A
Section 1 PCB Concentrations at 566.5 ft msl (edge)
Kinnickinnic River
Milwaukee, Wisconsin

KK0201	2 mg/kg
KK0202	9.28 mg/kg
KK0203	2.68 mg/kg
KK0203D	3.19 mg/kg
KK0204	6.28 mg/kg
Average	4.7 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 3A
Section PCB Concentrations to 566.5 ft msl (edge)
Kinnickinnic River
Milwaukee, Wisconsin

KK0205	12.5 mg/kg
KK0206	3.51 mg/kg
KK0207	ns
KK0207R	1.9 mg/kg
KK0208	ns
Average	6.0 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 3A
Section 3 PCB Concentrations to 566.5 ft msl (edge)
Kinnickinnic River
Milwaukee, Wisconsin

KK0209	5.11 mg/kg
KK0210	0.35 mg/kg
KK0211	8.9 mg/kg
KK0212	6.67 mg/kg
KK0213	2.96 mg/kg
KK0214	ns
Average	4.8 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 3B (main channel)
Section 1 - PCB Concentrations (mg/kg) at 561 feet msl
Kinnickinnic River
Milwaukee, Wisconsin

KK0201	0.77 mg/kg
KK0202	2.73 mg/kg
KK0203	1.92 mg/kg
KK0203D	2.4 mg/kg
KK0204	1.4 mg/kg
Average	1.8 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 3B (main channel)
Section 2 - PCB Concentrations (mg/kg) at 561 to 557 ft msl
Kinnickinnic River
Milwaukee, Wisconsin

KK0205	2.1 mg/kg
KK0206	0.87 mg/kg
KK0207	3.11 mg/kg
KK0207R	2.1 mg/kg
KK0208	ns
Average	2.0 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 3B (main channel)
Section 3 PCB Concentrations (mg/kg) at 557 ft msl
Kinnickinnic River
Milwaukee, Wisconsin

KK0209	ns
KK0210	ns
KK0211	ns
KK0212	ns
KK0213	ns
KK0214	ns
Average	ns mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 3B (channel edge)

Section 1 - PCB Concentrations (mg/kg) at 566 feet msl

Kinnickinnic River

Milwaukee, Wisconsin

KK0201	0.85 mg/kg
KK0202	6.36 mg/kg
KK0203	15.74 mg/kg
KK0203D	9.52 mg/kg
KK0204	6.28 mg/kg
Average	7.8 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 3B (channel edge)
Section 2 - PCB Concentrations (mg/kg) at 566 ft msl
Kinnickinnic River
Milwaukee, Wisconsin

KK0205	12.5 mg/kg
KK0206	3.51 mg/kg
KK0207	ns
KK0207R	1.9 mg/kg
KK0208	ns
Average	6.0 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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Alternative 3B (channel edge)
Section 3 PCB Concentrations (mg/kg) at 566 ft msl
Kinnickinnic River
Milwaukee, Wisconsin

KK0209	16 mg/kg
KK0210	0.35 mg/kg
KK0211	8.9 mg/kg
KK0212	6.67 mg/kg
KK0213	2.96 mg/kg
KK0214	1.4 mg/kg
Average	6.0 mg/kg PCBs in Surficial Sediment

Source: USACE WDNR. April 7, 2004. Kinnickinnic River, Wisconsin - Milwaukee Estuary of Concern - Deepening/Remediation Concept Design Documentation Report. Appendix D.

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